

Montana Adolescent Health Risk Behavior... Where We're Heading

Spencer Sartorius
Administrator

Susan Court
Health/HIV Specialist

Richard Chiotti
Program Director

Health Enhancement and Safety Division

Background:

Since 1991, the Montana Office of Public Instruction and partner agencies and organizations have conducted the Youth Risk Behavior Survey (YRBS) on a random basis to students in grades 9 through 12. The YRBS was developed by the Centers for Disease Control and Prevention (CDC) in the late 1980s and is currently used in over 40 states nationwide. The CDC does the data analysis and the surveys are done on an anonymous, voluntary basis.

The survey includes six broad areas that the CDC determined put youth at the greatest risk for health and social problems that occur during adolescence and adulthood and are the leading causes of death, illness, injury, and/or social problems in our country. The categories include: 1) behaviors that result in unintentional and intentional injuries, 2) tobacco use, 3) alcohol and drug abuse, 4) sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies, 5) physical inactivity, and 6) dietary behaviors. The CDC has reported that nearly 70 percent of all mortality and morbidity is the result of heart disease, cancer and stroke... and that these three leading causes of death in the U.S. are the result of three behaviors: tobacco use, physical inactivity and poor dietary behaviors.

The YRBS is Montana's most comprehensive look at the health risk behaviors of its youth. Since 1991, the survey has been given in the spring of odd-numbered years ('91, '93, '95, etc). All public and non-public schools may participate in the YRBS. A random sample is drawn to provide statewide data and, if participation is high enough, "weighted data" is generated. Weighted data means that the sample is representative of all the students who could have been surveyed. Thus, the data results can be used to make inferences about the health risk behaviors of the entire grade 9-12 student population. All participating schools receive their own school-specific data, which they can then compare to state and national results. With the additional schools participating, approximately 15,000 students participated EACH time the survey was given. This means that Montana YRBS trend data is based on about 75,000 student respondents.

The survey results have been shared with partner agencies and organizations: Department of Public Health and Human Services, Indian Health Service, Montana Board of Crime Control, Montana Department of Transportation, Montana Healthy Mothers/Healthy Babies, and Blue Cross and Blue Shield of Montana. These agencies and their constituents have used the survey results to identify needs and provide program services. Local schools have used the information in curriculum development and in program initiation and modification.

Many schools and communities initiated “drug and alcohol” surveys in the 1970s and 1980s for two reasons: first, to determine the need for drug and alcohol prevention programs and second, to dispel community denial. Those were the years you heard people saying: “Our kids don’t drink or use drugs. That’s something you find back East or in the big cities.” After numerous local and statewide surveys involving drug and alcohol use, you don’t hear that from people anymore. We all know that drug and alcohol problems are just as numerous here as they are anywhere else... and maybe more so! The YRBS has helped dispel other myths about our kids: that just because we live in a grand, rural, beautiful state like Montana that somehow we are immune from the health risk behaviors so visible in other states. We now know that our youth face the same risks and are involved in the same behaviors as kids anywhere else. In fact, in some areas we are at disturbingly higher risk than the youth are “back East” or in the big cities.

What we know about the health of our kids:

The YRBS has shown us two very important things. First, it has shown us that too many of our youth are involved in health risk behaviors... they use drugs, or drink alcohol, have sex, or smoke. In fact, many are involved in more than one risk area and that is especially disturbing. However, the survey also tells us something very important about our youth... that a significant number of our youth are not involved in risk behaviors. Many Montana youth don’t drink, don’t smoke or use drugs, don’t have sex and do ride with their seatbelts fastened. So, while we focus on the health risk behavior of our kids in this article, we need to realize that there are a significant number of our kids who are not involved. It’s these kids that we need to build upon, utilize and promote. Peer acceptance and peer involvement are important to our youth and they need to realize that **not** “all kids are doing it.”

Beside basic demographics, the YRBS asks approximately 70 questions concerning health risk behavior... and all of these show our youth at a risk behavior that is too high... simply not acceptable. In fact, just because our youth might exhibit risk behaviors that are “average” or even lower than national averages... even one adolescent riding in a car with someone who is drinking is too much. One youth high on cocaine is too many. One unwanted pregnancy and the emotional trauma that goes with that is too many.

Here are some of the things we know about the health risk behaviors of our kids based on the 1999 YRBS findings of students in grades 9 through 12:

Unintentional and intentional injury:

- Only 26 percent always wore a seat belt.
- About 43 percent rode in a car driven by a driver who had been drinking alcohol in the previous 30 days.
- About 20 percent had carried a weapon in the previous 30 days.

- Almost 13 percent had been in a physical fight at school in the previous 12 months.
- Nine percent reported having been forced to have sexual intercourse in their lifetime.
- Approximately 15 percent reported having made a plan to commit suicide and over 6 percent reported having attempted suicide.

Tobacco use:

- About 70 percent had ever tried smoking.
- Almost 25 percent were 12 years old or younger when they smoked their first cigarette.
- Thirteen percent indicated they were “regular” smokers and 18 percent said they were “frequent” smokers.
- Thirty percent indicated that they tried quitting in the previous six months.
- Over 18 percent indicated that they used smokeless tobacco in the previous 30 days.

Alcohol and other drug use:

- Over 86 percent said that they had at least one drink of alcohol in their lifetime and over 33 percent were under 12 when they had their first drink.
- Over 57 percent indicated that they were “current” drinkers (had a drink in the previous 30 days).
- Over 43 percent said they were binge drinkers (had 5 or more drinks within a short period of time).
- Forty-five percent indicated that they had used marijuana sometime during their lifetime and 25 percent were “current” users.
- Almost 10 percent indicated that they had used cocaine sometime in their lifetime.
- Over 4 percent had used steroids and over 16 percent had used an inhalant.

Sexual behaviors:

- Over 42 percent indicated that they have had sexual intercourse.
- Almost 30 percent were “currently” sexually active (had intercourse sometime in the previous three months).
- Almost 15 percent had used either drugs or alcohol before the last time they had sexual intercourse.
- Almost 95 percent had never been pregnant or gotten someone else pregnant.
- Of those who were sexually active, about 60 percent used a condom at their last intercourse.

Dietary behaviors:

- Over 40 percent of the students were currently trying to lose weight.
- About 55 percent of the students thought they “were about the right weight.”

- Fifty-eight percent exercised during the previous 30 days to lose weight.
- Almost 90 percent ate fruit in the previous week, 76 percent ate a green salad, 80 percent ate potatoes and 60 percent ate carrots.
- Ninety-one percent drank milk in the previous week.

Physical inactivity:

- Almost 57 percent exercised for at least 20 minutes on four or more days during the previous week that made them sweat and breathe hard.
- About 38 percent walked or bicycled for at least 30 minutes on four or more days during the previous week.
- About 48 percent had participated in physical education class on three of the last five school days.
- About 44 percent spent more than 20 minutes actually exercising or playing sports in physical education class.
- Over 75 percent said they watched two hours or less of TV on an average school day.

What can we tell about our kids from the 10 years of the YRBS?

The Montana YRBS has been given five times. While some of the questions have changed, many have remained the same and we can look at changes over a ten-year span. We are not claiming that the trends that we mention are statistically significant, or that they are anything but expected variations. However, we do maintain that when looked at over a period of 10 years, some trends do stand out. So here are some of the trends, both positive and negative, that Montana students are showing:

On the positive side,

- Seatbelt usage has increased.
- Carrying weapons has decreased.
- Carrying a weapon at school has decreased.
- Fighting has decreased.
- Fighting at school has decreased.
- Considering, planning or attempting suicide has decreased.
- Ability to buy cigarettes in a convenience store, gas station, or supermarket has decreased, and more students were asked to show proof of age.
- Smokeless tobacco use on school property has decreased.
- Drinking for the first time by those 12 or younger has decreased.
- Sexual intercourse has decreased. Also, sexual intercourse for the first time when 12 or younger has decreased.
- Those having multiple sex partners decreased.
- Those currently having sexual intercourse decreased.

On the negative side,

- Frequent smoking has increased.
- Binge drinking has gradually increased.
- Marijuana use has gradually increased.
- First use of marijuana at age 12 or younger has increased.
- Current marijuana use has gradually increased.
- Cocaine use has gradually increased.
- Exercise or activity time in physical education has decreased.

What do we make of these trends?

Many of the trends are heartening. Positive changes... less injury-producing behaviors, less smokeless tobacco use, less ability to illegally purchase tobacco products, and less sexual activity... are especially good news in light of the fact that there are numerous programs in our schools and communities that are attempting to deal with these behaviors. There may be a correlation between these efforts and the changes noted.

However, the changes surrounding alcohol, tobacco, marijuana and cocaine use are troubling in that numerous programs attempt to deal with these issues also. The use of the newly acquired “tobacco money” may help deal with tobacco issues even more as additional prevention and intervention programs are initiated in schools and communities. Another potential for assistance in this area is the relatively new CSAP Community Incentive Grant program which provides funding for communities to develop community-wide programs targeting the risk factors associated with drug, alcohol and tobacco use.

One especially troubling trend shows itself in the amount of activity students receive in “physical education.” While Montana has gone to a “Health Enhancement” program... and there might be some confusion regarding terminology... we think that most students understand that “physical education” is what they do in the gym. This leads us to believe that less gym time is being spent on physical activity. It bears mentioning here that typically, our grades 9 and 10 students receive a “limited” amount of Health Enhancement (physical education and health education) and possibly none at all in grades 11 and 12. The trend toward less Health Enhancement is troubling in light of the national effort in Healthy People 2010 and the Montana Department of Public Health and Human Services’ Cardiovascular Disease Prevention State Plan 2000, which both call for daily physical education or Health Enhancement for all grades K-12.

Sub-Populations:

Because we have given the YRBS to so many students over the past 10 years, we can draw out and look at specific populations of students. Although this doesn’t give us a random look at these populations, which makes it impossible to make generalizations, it does suggest some interesting trends. When we take the 14 items that were mentioned as positive trends in the 12 bulleted statements above, and compare the 1999 data from the general survey to the data from three sub-populations (Indian students on reservations, urban Indian students, and students enrolled in alternative schools), there are some

interesting differences. In general, what is shown is that Indian students on a reservation engage in health risk behaviors at a greater rate than the general population. Indian students in urban settings engage in health risk behaviors at a greater rate than either the general population OR Indian students on a reservation. And, students that attend an alternative school engage in health risk behaviors at a greater rate than either the general population, Indian students on a reservation, or Indian students in an urban setting.

Conclusion and Recommendations:

The multi-year findings of the YRBS leads us to draw several conclusions and make several recommendations. These are:

* **CONCLUSION:** Too many Montana high school youth exhibit negative health behaviors, which put them at risk for mortality, morbidity and social problems. These behaviors reduce the chances of our youth from reaching their academic potential or finishing high school.

RECOMMENDATION: Programs that are in place to deal with adolescent health risk behaviors should be continued. Renewed prevention efforts by education, public health and the community should be taken.

* **CONCLUSION:** Many Montana youth are NOT involved in destructive health risk behaviors.

RECOMMENDATION: Programs that show the 'positive' side of the YRBS should be promoted. These programs should advertise and promote the fact that most kids are NOT "doing it," or "taking it." Programs should also involve the use of youth where possible and appropriate. Our youth are a vast, enthusiastic and often untapped resource.

* **CONCLUSION:** There are many positive trends that are exhibited in the health behaviors of Montana youth from 1991 to 1999.

RECOMMENDATION: Programs that deal with these positive trend behaviors should be continued and evaluated. Additional efforts should be considered and implemented by education, public health and community agencies and organizations. Further collaboration between programs needs to be encouraged and needs to occur.

* **CONCLUSION:** There are some disturbing negative trends in the health behaviors of Montana youth from 1991 to 1999.

RECOMMENDATION: Renewed efforts need to be initiated in these areas. Established programs that have shown to have positive impact on the health behaviors of youth need to be maintained. Education, public health, and community-based organizations should assess prevention needs and develop strategies to meet them.

* **CONCLUSION:** Sub-populations of the YRBS, including Indian students living on reservations, Indian students in an urban setting and students attending alternative schools, may be engaging in health risk behaviors at an even greater rate than the general population.

RECOMMENDATION: Schools, communities, and reservations with populations of these students should consider the development or adoption of targeted or specialized programs designed to meet the health needs of these students. They need to be focused to the specific culture and nature of these students and relevant to their lifestyle and setting.

Finally, over the past half-century, our schools have been asked to take on more and more: programs for those with special needs (both disabled and gifted); alcohol, tobacco and other drug prevention efforts; identification of students with emotional, social and physical problems; vision and other health screening; dental programs; immunizations; and more. At the same time, efforts to increase academic accountability around the “basics” have increased with the public demanding better reading results, high math scores, etc. The authors realize that schools are “juggling a large number of balls” and trying to keep them all in the air without dropping one. However, with that said, the simple fact is that a student who is hungry cannot learn well, a student on drugs does not learn and a pregnant student often drops out. We simply must look at the health risks of students in the school program. So, we make the following recommendations specific to schools:

1. Use available sources of program help such as Title IV (Safe and Drug-Free Schools and Communities program), School Breakfast and Lunch programs, Title I, Title VI, 21st Century Learning grants, etc.
2. Ensure that Health Enhancement teachers teach to the Montana Health Enhancement Standards adopted by the Board of Public Education in October 1999.
3. Ensure adequate time is available for Health Enhancement to meet the Standards. To meet minimum Accreditation Standards, Health Enhancement (including physical activity) should be conducted daily at the elementary level and _ unit should be provided at the junior high/middle school level. At the high school level 1 unit is required over two years. This is usually completed after the sophomore grade.
4. The YRBS shows us that health risk behavior increases markedly during each year of the high school years ... just when the amount of health enhancement provided is declining or eliminated. Consequently, we recommend that health enhancement be required during each year of high school.

Research shows that early prevention efforts pay huge dividends later. For example, the use of bicycle helmets reduces the risk of head injuries by an estimated 85 percent. Bicycle-related head injuries have an annual economic cost of more than \$3 billion. The measles-mumps-rubella (MMR) vaccine saves over \$16 in direct medical costs for every \$1 spent. Every \$1 spent on fluoride rinse programs saves \$80 in dental care costs. Coronary heart disease is the leading cause of death in the United States and an estimated 35 percent could have been eliminated by increasing physical activity. Direct medical costs of heart disease and the associated lost productivity is staggering! The future of our state requires that we continue to be proactive to meet the health needs of our youth. Healthy behaviors learned early on will oftentimes nurture academic success and will lead to healthier adult lives.

Parents are concerned about their kids. They want them to learn to communicate effectively, learn to compute accurately, learn about our world and the issues it faces and they want them to be healthy. It is not enough to merely LOOK healthy. The health enhancing behaviors that we do as adults are usually initiated during adolescence. Exercising, eating right, and not smoking, are all learned during adolescence. The older a person is when making a lifestyle change, the more difficult it is to make and the less chance that it will be sustained. We need to work together... parents, schools, and communities... to provide programs that will promote healthy behaviors in children, adolescents and adults.